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POLICY TRADEOFFS AND THE 1990 FOOD AND AGRICULTURE LEGISLATION

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The food and agriculture legislation to be enacted in 1990 will be the latest evolutionary step in a 58 year history of public price and income support for the U.S. farm sector. In keeping with this evolutionary process, the foundation for the 1990 legislation will rest upon its immediate predecessor, the Food Security Act of 1985 (FSA85). Because of general satisfaction with FSA85, major changes in food and agriculture policy are unlikely. Nevertheless, significant concerns have emerged. These concerns and their implications for the policy tradeoffs which likely will frame food and agriculture policy in the early 1990s are the focus of this article.

Legacy of the Food Security Act of 1985

Major objectives of FSA85 were to 1) relieve farm financial stress, 2) increase exports, 3) protect land resources, especially reduce soil erosion, and 4) reduce the cost of farm price and income support programs (Congressional Quarterly, Inc.). Determining FSA85's impact on achieving these objectives is difficult because the limited time between enactment of FSA85 and debate on the 1990 legislation hinders determination of longer term economic effects. In addition, the severe drought of 1988 significantly reduced grain stocks and increased farm prices, thereby further clouding the impacts of FSA85.

Despite this caveat, FSA85 appears to have contributed to the increase in net farm income from $38 billion in 1986 to a midpoint estimate of $50.5 billion in 1989 (U.S. Department of Agriculture (USDA),

December 1989). FSA85's reduction in price support levels have lowered feed costs, thus improving livestock sector profits. Its large acreage retirement programs have curtailed the demand for purchased input and allowed farmers to remove their least productive land from production, thus improving crop sector profits. Lower prices and FSA85's export expansion programs have been partly responsible for an increase in agricultural exports from $26 billion during fiscal year 1986 to a forecasted $39 billion during fiscal year 1989 (USDA, December 1989). Last, the conservation reserve and increased land set asides have reduced soil erosion. Thus, FSA85 has at least partially contributed to attainment of objectives one, two and three.

In contrast, as regards farm program cost, a mixed picture emerges. Costs have declined from approximately $26 billion in fiscal year 1986 (Executive Office of the President) to a projected $11 to $14 billion over fiscal years 1990 and 1991 (Morton). These projections are consistent with the $12.5 billion average for fiscal years 1984 and 1985, but substantially exceed the $3.4 billion average for fiscal years 1980 and 1981 (Executive Office of the President). Thus, government expenditures on farm programs have not increased compared to the last years of the 1981 food and agriculture legislation, but substantially exceed those incurred during the last years of the 1977 legislation.

Implications for 1990 Food and Agriculture Legislation

The history of farm policy reveals that, while it is evolutionary, major steps in the evolutionary process occur when a farm policy crisis exists. Examples of significant evolutionary steps include:

1) the large grain stocks of the late 1950s/early 1960s which led to the replacement of mandatory supply controls by paid land diversions for major field crops, and
2) the export-led price explosion of the early 1970s which led to the addition of direct income support through target prices to the traditional method of indirect income support through nonrecourse loan rates.

As of late 1989, many issues have surfaced concerning food and agriculture policy. Some, such as planting flexibility, size and role of export promotion programs, cost of farm programs, and role of crop insurance are farm price and income support issues. Others, such as food safety, water quality, and research and extension funding for sustainable agriculture, have an environmental component. Another set revolve around non-price and income support issues, such as commodity checkoffs, rural development, and commodity donations for food assistance programs.

While discussions continue on these issues, no farm policy crisis has emerged. This can be attributed largely to widespread satisfaction with the performance of FSA85. In addition, issues which could generate major changes in farm policy, such as groundwater quality, have not generated policy alternatives which alter the mechanisms or philosophy of current farm programs and enjoy wide-spread support. Specific difficulties confronting groundwater quality are the lack of verified information concerning the role of farming practices in groundwater contamination and concerning the impact on aggregate farm output and prices of wide-spread adoption of farming practices designed to reduce chemical use.

In conclusion, there is little reason to believe that major changes in food and agriculture policy are likely in 1990. Nevertheless, the composition of current farm policy actors reveals an important division. Specifically, the actors may be divided into two groups: those whose major farm policy objective is directly impacted by the price and quantity of farm program commodities and those whose major farm policy objective is concerned with distortions resulting from the historic compromise on food and agriculture policy. This division and its potential impact on policy tradeoffs in the 1990s are discussed in the remaining sections.

Actors Concerned with the Price and Quantity of Farm Program Commodities

While each farm policy actor has several objectives relative to farm policy, each also has a clearly defined objective around which their focus on farm policy revolves (Table 1). Farm policy actors whose most important objective directly relates to the price and quantity of farm program commodities include program commodity producers, input suppliers, output handlers, users and processors, consumers, food aid advocates, and taxpayers.

Program commodity producers' major farm policy objective is high farm income. Given production costs, high farm income is obtained through a combination of high prices and large production. High farm income in turn stimulates farmers to purchase large quantities of farm inputs. higher net income for farm input suppliers result.

Table 1: U.S. FARM POLICY ACTORS AND THEIR MAJOR POLICY OBJECTIVE(S), 1990 FARM BILL DEBATE

Actor	Program Commodity Prices	Commodity Quantity	Major Objective(s)
Program Commodity Producers	High	High	High Farm Income
Input Suppliers	High	High	High Farm Input Purchases
Output Handlers, Users, and Processors	Low	High	High Output Volume and Low Commodity Input Prices
Consumers	Not High	High	Safe Food at Reasonable Prices
Food Aid Advocates	Low	High	Food Access by the Poor
Taxpayers	Not Low	Not High	Low Government Costs
Environmentalists	---	---	Resource Sustainability
Exporters to U.S.	---	---	Access to U.S. Markets
Rural Development Advocates	---	---	Increased Funding
U.S. Export Competitors	---	---	No U.S. Export Subsidies

In contrast to program commodity producers and input suppliers, food aid advocates and output handlers, users, and processors prefer low prices and high farm output. High farm output generates large throughput for output handlers and processors, which in turn translates into higher business income. Low prices mean output users and processors, including livestock producers, have access to low cost inputs. Given output price, lower costs result in higher business income. The combination of low prices and high farm output also imply increased access to food by the poor, because of both downward pressure on food prices and increased likelihood of food distribution programs to help dispose of surpluses.

The major farm policy objective of consumers has been safe food at reasonable prices. Consumer behavior during the last 25 years suggests they are more concerned with avoiding high prices than with paying low prices. For example, during the price explosion of the early 1970s, consumers become very vocal about the rising price of food. On the other hand, consumers in general did not lobby for lower farm price supports despite the substantial surpluses that existed during the 1980s.

Consumers want to avoid high farm prices because rapidly increasing farm prices translate into faster inflation in the price of food than prices of other goods and services. As a result, discretionary spending must be reallocated to cover rising food costs.

Taxpayers, the last member of this group of actors, prefer minimum government spending, which translates into low taxes. Expenditures on food and agriculture programs are lowest when farm prices and output are both moderate. High prices and low output generate consumer pressure for public expenditures to expand both production and public stocks. This

response was observed during the price explosion of the early 1970s. On the other hand, a low price/high quantity situation produces pressure from producers for expanded income support. The farm surpluses of the early and mid 1980s illustrate this policy pressure.

Historic Food and Agriculture Policy Compromise

These six actors have been a fixture in food and farm policy deliberations since the 1930s, and their interplay has defined the historic compromise on food and agriculture policy. The compromise involves: 1) protection against low farm income via nonrecourse price support loans and direct income payments, 2) protection against high commodity prices via public storage programs, 3) increased food availability for the domestic and foreign poor via food aid programs such as domestic feeding programs, food stamps, and PL480, and 4) protection against high budget costs by requiring farmers to remove land from production to qualify for farm program benefits. This compromise gives each of the six actors at least part of their major farm policy objective by providing insurance against an outcome they prefer to avoid.

The protection against low farm income has been implemented through price and income support programs which distribute benefits to individual farmers based on their level of production and a national average price. Production may be current production, such as for soybeans or milk, or production over some historical period, such as base yields and acres for feed grains, wheat, cotton, and rice. The historical period has been periodically updated to reflect current production patterns either by a formula or through legislation.

Both target prices and nonrecourse loan rates are national prices. The former is applied directly to all eligible production. The latter is adjusted at the individual county level to reflect historical transportation differentials between areas of surplus and deficit production. Thus, the price used to determine farm program benefits are essentially the same for all producers. Therefore, producers who receive the most farm program benefits are those with the highest current or periodically-updated historical production.

For comparison, in a purely competitive market, such as exits for major U.S. farm program commodities, an individual producer can not affect the market price he/she receives. Thus, price is generally the same for all producers after being adjusted for transportation differences between areas of surpluses and deficits. Therefore, producers of major farm program commodities who generate the highest gross revenue from market sales are those who produce the highest quantity of production.

The similarity in determination of an individual farmer's farm program benefits and gross revenue in a free market suggest that, on average, the distribution of farm program benefits and market receipts for program commodities should be approximately the same. This can be illustrated by the following data for 1987:

Farm Sales	Proportion of Major Program Commodity Sales[1]	Proportion of Total Direct Government Payments
$500,000+	14.75%	10.21%
$250,000-$499,999	24.23%	21.31%
$100,000-$249,999	34.21%	36.30%
$40,000 - $99,999	18.74%	21.65%
$10,000 - $39,999	6.99%	8.89%
$9,000 or less	1.08%	1.63%

[1] Includes 1987 sales and new Commodity Credit Corporation crop loans for corn, wheat, rice, cotton, barley, oats, and soybeans.

SOURCE: U.S. Department of Agriculture (USDA), December 1988, page 9.

On average, larger farms account for a slightly smaller proportion of direct government payments than of sales. This difference can be attributed in part to payment limits.

Because gross market receipts in a free purely competitive market and farm program benefits under U.S. farm policy are determined by similar conditions on price and quantity, producers with the lowest cost of production generate the highest net income under both scenarios. Thus, over time, the most efficient producers have survived and prospered under U.S. farm programs just as they would under the free market.

Actors Concerned With Farm Price and Income Support Policy Distortions

There are many other farm policy actors, but four are especially prominent at present: exporters to the U.S., U.S. export competitors, environmentalists, and rural development advocates. While it is inappropriate to view these actors as having a common agenda, their major farm policy objectives do contain a common thread. This thread is that

the historic food and agriculture policy compromise has generated distortions which directly affect their well-being.

Exporters to the U.S. and U.S. export competitors are concerned with barriers to trade erected as a part of U.S. farm programs. These barriers include quotas on imports into the U.S. and export promotion programs. Quotas can be designed to raise domestic prices, such as for sugar, or to protect U.S. farm price support prgrams from the entry of low cost imports, such as for dairy products. The latter is invoked under Section 22 of the General Agreement on Tariffs and Trade.

Export promotion programs lower the price of U.S. farm products in international trade below the level consistent with the domestic support price. The lower international price reduces export competitors' returns and market share. For example, the export enhancement programs enacted in FSA85 have negatively impacted many U.S. wheat export competitors, including Australia, Canada, and Argentina.

Environmentalists are concerned that current farm policy encourages excessive chemical use and soil loss. Land retirement programs raise farm commodity prices by reducing supply. The higher prices encourage use of additional purchased inputs, such as fertilizers and pesticides, on the acreage which is planted. Increased application of chemicals may show up as groundwater contamination.

A second concern is that use of historical production patterns, specifically base acres, to determine receipt of direct income payments encourages farmers to maximize program crop base acres. This discourages planting of crops that do not have acreage bases. The use of a more

diversified crop rotation, particularly one that includes hay and pasture, likely will reduce soil erosion and use of agricultural chemicals.

Rural development advocates are concerned that farm programs may siphon funds from more encompassing rural life issues. Their concern is heightened by current federal budget constraints and an equity consideration. From 1985 through 1987, farm and off-farm income per farm operation averaged $37,226 (USDA, September 1989). In comparison, U.S. household income averaged $30,656 over this period (U.S. Bureau of the Census, February 1989). Furthermore, almost half of direct income support payments go to farms with farm sales between $100,000 and $499,999 (USDA, September 1989). These operations averaged $73,791 in farm and off-farm income from 1985 through 1987 (USDA, September 1989). Larger farm operations may provide income for more than one household. However, even if total income for farms with sales between $100,000 and $499,999 is divided by two, their farm household income still exceeds average national household income.

Historically, most farm policy debates have involved issues and tradeoffs related to the historic compromise on food and agriculture policy: the costs of farm programs, the level of price support, the quantity of public stocks, and the scope of food assistance programs. In contrast, the issues raised by these four new actors are concerned with distortions generated by the historic compromise. Addressing these distortions will involve a new set of policy tradeoffs.

Policy Tradeoffs for the 1990s

Budget Constraint

Recent events in Eastern Europe suggest that military expenditures will be targeted for significant cuts. However, annual federal deficits of $150 to $161 billion over fiscal years 1987 and 1989 (Calmes), a Gramm-Rudman deficit target of $64 billion in fiscal year 1991 (Calmes), and the unwillingness of American taxpayers to support higher taxes suggest military cuts will not be sufficient to eliminate the deficit as a primary legislative concern.

Continuing budget constraints mean fund for new programs generally will come from current programs. Recent federal budgets have cut spending on farm price and income support programs, in part to pay for new initiatives such as anti-drug programs. Most evidence points to further cuts in farm programs to pay for new legislative initiatives.

Funding for enhanced rural development efforts or for research and extension on issues championed by environmentalists, such as sustainable agriculture, likely will come from current food and agriculture programs. Consequently, the debate on these new initiatives will center not only on their merit but also on the policy tradeoffs between actors supporting them and actors involved in the historic food and agriculture policy compromise. The latter will try to protect spending on programs which implement the historic compromise.

Redistribution of Farm Program Spending Among Commodities

Environmentalist are concerned that incentives be returned for crop rotations while farm producers desire an increase in planting flexibility.

These parallel concerns could be addressed by changing crop set-asides from crop specific set-asides to a general farm set-aside. Under the latter, producers would be able to plant any crop on their land not set aside in government programs. This would represent a return to the normal cropland acreage used in the early 1970s.

However, the planting flexibility associated with the normal cropland acreage is not likely to generate increased use of crop rotations because producers will still plant the most profitable crop. The most profitable crop is generally a program commodity when participating in the government program, unless the farm's direct government payments exceed the payment limit. Therefore, solving the rotation question will require either a reduction in target prices for program commodities or a redistribution of deficiency payments to other crops, including oilseeds, pasture, and hay.

The redistribution of program payments would produce a gain for nonprogram crop producers and a loss for program crop producers. The price of program crops would increase while the price of nonprogram crops would decline as the amount of land planted to various crops shift to reflect the change in economic incentives. The net gain for program and nonprogram crop producers would depend upon the tradeoff between higher (lower) prices and lower (higher) government payments. In addition, the increased planting of hay and pasture is likely to mean less grain output. This would impact negatively on the welfare of output users, handlers, and processors.

Food Security

Farm producers generally associate food security with an adequate supply of food, but consumers include quality of food as part of food security. Quality concerns have traditionally focused on sanitary conditions in food processing and retailing and the use of food additives. However, since the 1960s, quality concerns have increasingly included farming practices. Of specific concern has been pesticide residues on crops and antibiotic residues in meat.

Recently, environmentalists have proposed another dimension to food security: the need for resource sustainability to insure long term production capability. Resource sustainability is usually associated with reducing the intensiveness of production by increasing the diversity in crop rotations, using less chemicals, and targeting fragile lands for long term retirement.

While scientific evidence is too scarce to conclude that using fewer chemicals and antibiotics or using a more diverse crop rotation would necessarily lead to smaller production, reductions are likely in the short run if only because of the need to adopt different technologies. Thus, tradeoffs are likely between higher prices/less output and food quality/resource sustainability. Food aid advocates and output handlers, users, and processors would be negatively affected while farm program producers would earn a higher income and taxpayers would spend less on farm programs.

National Versus International Sovereignty Over Food and Farm Policy

The policy distortions that affect U.S. food importers and U.S. farm

export competitors raise questions about sovereignty over a nation's food policy. Given that geographical boundaries still define political realities, to what extent does a country possess the sovereign right to assure the food security of its citizens while imposing costs upon other members of an increasingly integrated world economy? This question becomes particularly nebulous when food security is defined to include food quality and resource sustainability. No matter what conclusions the current trade negotiations reach, this issue is likely to be a source of continuing international contention throughout the 1990s.

Farm Price and Income Support Entitlement Criteria

Historically, farmers have established entitlement to farm program benefits by setting aside the required amount of land. However, FSA85 added a second entitlement criteria: reducing soil erosion to a prespecified level on highly erodible land. This entitlement criteria places more constraints on a farmer's private decision making process than has historically existed. Satisfying it will require use of certain production practices and exclude planting of certain crops.

A factor that is likely to propel consideration of additional entitlement criteria is a fundamental change in the economic situation of the farm community. In 1934, approximately when farm price and income support programs were first enacted, the per capita income of the farm population was only one-third of the per capita income of the nonfarm population (USDA, September 1984). By the late 1970s and early 1980s, the latest period of time for which data is available, per capita income of the farm population had risen to 65-90 percent of the nonfarm population

(USDA, September 1984). As previously discussed, average per farm income currently exceeds average national household income.

Increasingly, the question is being asked why should the public spend large sums of money on farmers when they are not financially disadvantaged. One answer is to add entitlement criteria that farmers must satisfy to receive farm program benefits. These new entitlement criteria would be designed to insure that socially desirable benefits are obtained from farm programs.

Summary and Conclusions

General satisfaction with the performance of the Food Security Act of 1985 suggests that the 1990 food and agriculture legislation will involve only minor modifications of the 1985 legislation. However, numerous concerns about food and agriculture policy are being raised, including budgetary cost, domestic versus international sovereignty over food and farm policy, environmental issues, the definition of food security, the need for rural development, and the extent and nature of entitlement criteria. The tradeoffs which will be necessary to address these issues are unlikely to be made in the 1990 legislation, but will likely form the foundation for farm policy debates throughout the early 1990s. Because of the diversity of these issues, policy actors will need to be extremely flexible in responding to the emergence of any one or more of the issues as a farm policy crisis.

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